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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Chun Yuan

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LEE & HAYES PLLC

421 W RIVERSIDE AVENUE SUITE 500

SPOKANE, WA 99201

EXAMINER

RICHARDSON, THOMAS W

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/760,441	Applicant(s) YUAN ET AL.	
	Examiner THOMAS RICHARDSON	Art Unit 4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-20 are amended and pending for examination.

Claims 21-26 are cancelled.

Claims 1-20 are rejected.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0004998, Datta and US 2004/0068579, Marmigere et al.

4. As per amended claim 1, Datta teaches a method of communicating between two computing devices, the method comprising:

receiving, by a first computing device, a request for content that includes an item cached by the first computing device (page 7, paragraph [0090], where the dynamic cache server receives a request for a web page);

sending, by the first computing device to a second computing device, the request (page 7, paragraph [0090], where the cache server passes the request to the back end monitor);

receiving, by the first computing device from the second computing device, content generated by the second computing device (page 7, paragraph [0090], where the back end monitor performs processing and forwards the content back to the cache server);

combining, by the first computing device, the cached item and the generated content (page 7, paragraph [0090], where the cache server assembles the layout instructions); and

sending, by the first computing device, the combined content to a destination (page 7, paragraph [0090], where the cache server serves the web page).

Datta does not teach forwarding the request along with an identifier to the cached data.

Marmigere teaches a distributed caching system where data is retrieved by a cache by means of identifiers. His system and method comprise:

sending, by a first device, an identifier associated with the cached item, the identifier being usable by the second computing device to determine content that is not to be included in the generated content (page 6, paragraph [0060], where the proxy server asks the web content servers for the information the proxy does

not have, identifying that content with the URL. The URL used to identify the content to be generated inherently identifies the content not to be generated, as that content is the content that is not expressly identified); and receiving, by the first device from the second device, content based on the identifier (page 6, paragraph [0060], where the web server returns the requested content).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Datta's system with the caching identifiers given by Marmigere. It would be beneficial in terms of speed and efficiency to process in the proxy server, as in Marmigere's system, with the cache index table. This allows the cache server to request only specific content from the content server (as in page 2, paragraph [0017], where the cache requests a selected object).

5. As per claim 2, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the cached item includes at least one of a web page and a fragment (Datta teaches this limitation. Page 7, paragraph [0090], where the cache server contains objects such as fragments or page layouts).

6. As per claim 3, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the identifier includes a cache key (Datta teaches this limitation. Page 10, paragraph [0113], where the template can include a key).

7. As per claim 4, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the generated content includes a place holder to represent the cached

item (Datta teaches this limitation. Page 9, paragraph [0110], where the generated content includes markers for the cached data).

8. As per amended claim 5, the combination of Datta and Marmigere teaches the method of Claim 1, further comprising incorporating, by the second computing device, in the generated content at least one cacheable item and metadata associated with the cacheable item, wherein the metadata enables the first computing device to cache the cacheable item. (Datta teaches this limitation. Page 8, paragraph [0099], where there is a key assigned to the cacheable data with instructions), and wherein the metadata enables the first computing device to cache the cacheable item (page 8, paragraph [0099], where the instructions include a “set” command).

9. As per claim 6, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising deleting, by the first computing device, the metadata before sending the combined content to the destination (Datta teaches this limitation. Page 8, paragraph [0102], where the set command is followed by the cache server, not included in the assembled content).

10. As per claim 7, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising:

 caching, by the first computing device, the cacheable item (Datta teaches this limitation. Page 8, paragraph [0102], where the cache server stores the data tagged with the “set” command); and

maintaining, by the first computing device, the cacheable item in accordance with the metadata (Datta teaches this limitation. Page 8, paragraph [0102], where the data is stored in the cache server).

11. As per claim 8, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising: implementing, by the first computing device, a policy for caching the cacheable item based on the metadata (Datta teaches this limitation. Page 8, paragraph [0102], where the “set” command causes the cache to store the data).

12. As per claim 9, the combination of Datta and Marmigere teaches the method of Claim 5, wherein the metadata includes at least one of a name, a key, and information for identifying conditions under which the cacheable item may be cached (Datta teaches this limitation. Page 8, paragraph [0102], where the data generated includes a template, key, and “set” command).

13. As per claim 10, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the generated content includes multiple items (Datta teaches this limitation. Page 7, paragraph [0090], where the data includes payout instructions and some content).

14. As per claim 11, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the first computing device is a proxy and the second computing device is a content server (Datta teaches this limitation. Page 7, paragraph [0090], where the system contains a proxy cache and a back end server).

15. As per amended claim 12, Datta teaches a system comprising:

a proxy server configured to process a request for content having items that are cached, the proxy server being further configured to forward the request (page 8, paragraph [0096], where the cacheable content is tagged); and
a content server configured to dynamically generate the content requested by the proxy server, the dynamically generated content having information for the proxy server to combine the dynamically generated content with the cached items for processing the request (page 10, paragraph [0113], where the content generated contains markers for the cached data).

Datta does not teach forwarding the request along with an identifier to the cached data. Marmigere teaches a distributed caching system where data is retrieved by a cache by means of identifiers. His system and method comprise:

forward identifiers associated with the cached items, the dynamically generated content excluding content related to the identifiers associated with the cached items (page 6, paragraph [0060], where the proxy server sends a request to the content server for the data that is not contained at the proxy server. The URL used to identify the content to be generated inherently identifies the content not to be generated, as that content is the content that is not expressly identified).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Datta's system with the caching identifiers given by Marmigere. It would be beneficial in terms of speed and efficiency to process in the proxy server, as in Marmigere's system, with the cache index table. This allows the cache server to request

only specific content from the content server (as in page 2, paragraph [0017], where the cache requests a selected object).

16. As per claim 13, the combination of Datta and Marmigere teaches the system of Claim 12, wherein the dynamically generated content includes multiple items that are not cached by the proxy server (Datta teaches this limitation. Page 10, paragraph [0113], where the banner and greeting are generated each time by the back end server).

17. As per claim 14, the combination of Datta and Marmigere teaches the system of Claim 13, wherein the items include at least one of a web page and a fragment (Datta teaches this limitation. Page 9, paragraph [0109], where the web page contains multiple blocks that can be tagged or untagged).

18. As per claim 15, the combination of Datta and Marmigere teaches the system of Claim 12, wherein the information in the content includes place holders for inserting the items cached by the proxy server (Datta teaches this limitation. Page 9, paragraph [0110], where the content contains markers for cached data).

19. As per claim 16, the combination of Datta and Marmigere teaches the system of Claim 15, wherein the place holders include at least one substitution tag (Datta teaches this limitation. Page 10, paragraph [0113], where the "get" command inserts cached data into the page).

20. As per claim 17, the combination of Datta and Marmigere teaches the system of Claim 15, wherein the identifiers include cache keys and each place holder is identified

with at least one of the cache keys (Datta teaches this limitation. Page 10, paragraph [0113], where each marker can include a key).

21. As per claim 18, the combination of Datta and Marmigere teaches the system of Claim 12, wherein a content server is further configured to generate cacheable items and metadata associated with the cacheable item in response to the request (page 9, paragraph [0110], where the “set” command can be added to generated data that is not in the cache), and wherein the proxy server is configured to cache the cacheable items in a computer-readable media and to use the cacheable items to process subsequent requests based on the metadata (Datta teaches this limitation. Page 9, paragraph [0112], where the “set” command stores the data in the cache server).

22. As per claim 19, the combination of Datta and Marmigere teaches the system of Claim 18, wherein the metadata includes at least one cache tag (Datta teaches this limitation. Page 9, paragraph [0111], where the data includes a key).

23. As per claim 20, the combination of Datta and Marmigere teaches the system of Claim 19, wherein the cache tag includes a key (Datta teaches this limitation. Page 9, paragraph [0111], where the data includes a key).

Response to Arguments

24. Applicant's amendment filed 22 January 2008 necessitated new ground(s) of rejection presented in this Office action. Therefore, Applicant's arguments with respect to independent claims 1 and 12 and claims 2-11 and 13-20 dependent thereon have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS RICHARDSON whose telephone number is (571)270-1191. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4121

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR

/Taghi T. Arani/

Supervisory Patent Examiner, Art Unit 4121

2/5/2008